Dediprog

Dediware User Manual

Dediprog Technology, Co., Ltd . All Rights Reserved.

1. INTRODUCTION 4

1.1. DEDIWARE 4

1.2. DEDIPROG PROGRAMMERS TABLE 4

2. QUICK START 5

3. SOFTWARE INSTALLATION GUIDE 6

3.1. OPERATING SYSTEM REQUIREMENT 6

3.2. SOFTWARE INSTALLATION 6

4. DEDIPROG MCUPROG SOFTWARE ENGINEERING GUI 10

4.1. PREPARE THE ENVIRONMENT 11

4.2. DWENGINEER GUI INTRODUCTION 12

4.3. DWENGINEER GUI TOOL BAR 14

4.4. DWENGINEER GUI FUNCTIONS 18

5. DEDIWARE PRODUCTION GUI 23

5.1. PREPARE THE ENVIRONMENT 23

5.2. DWPRODUCTION GUI INTRODUCTION 24

5.3. DWPRODUCTION GUI TOOL BAR 26

5.4. DWPRODUCTION GUI FUNCTIONS 27

APPENDIX 29

TROUBLESHOOTING 29

CONTACT INFORMATION 30

LICENCE AGREEMENT 30

WARRANTLY 31

1 Introduction

1.1 Dediware

This user manual illustrates how to install and use Dediprog Dediware Software with Dediprog programmers. Dediware is an innovative and easy to use software, it supports all the Dediprog programmers and has all the necessary functions; include basic functions like blank, read, program, content, compare, erase and advanced function like protection, auto-start, standalone download, auto-reset, swap and move buffer, copy buffer, these commands are also available.

Dediware has two different modes to dedicate different type of needs, Engineer mode is a specific mode to help engineers to test and develop. Production mode can control several programming devices simultaneously and individually to achieve the best productivity.

All updates and further versions of Dediware software are free to download and can be found on Dediprog official website: http;//www.Dediprog.com.

1.2 Dediprog Programmers Table

To have a more clear view of all Dediprog programmers, the following table illustrates features and specifications of each Dediprog programmer. To get more detail information of our DediProg products and hardware usage, please refer to our products specification on Dediprog official website: http://www.DediProg.com

2 Quick Start

A. **Hardware installation:** Connect Dediprog programmer to computer using supplied USB cable and turn on programmer.

B. **Software installation:** Run the Software installation program and follow the on-screen instructions to fully install.

C. **Run Dediware:** Double click on Dediware icon to run Dediware and Dediware will search and scan for connected Dediprog programmer.

D. **Programming a chip:** Click **Select** to select the chip to be programmed from the list of **Manually Select Chip Type Window**

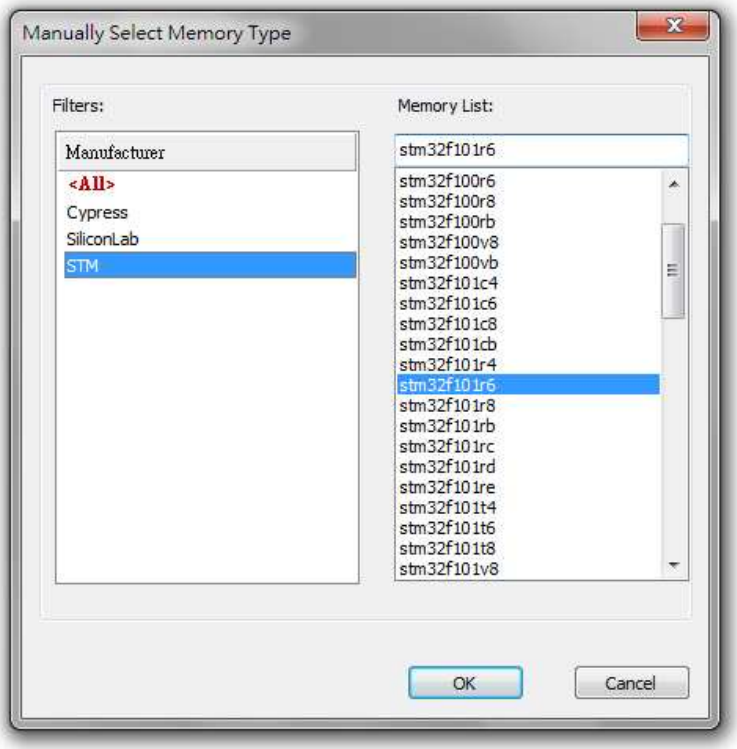


Figure 1: Manually Select Chip Type Window

Click **Load** or choose **Load File** under **File** menu to load target file into buffer.

Place chip into Dediprog programmer. Click **Blank** to check if the chip is blank and click **Program** to program file into chip. After programming, click **Verify** or **Read** to examine or read the programmed chip. The entire programming status will be displayed in the **Log window** for user to understand and follow programming operations.

3 Software Installation Guide

3.1 Operating System Requirement

Dediware supports Windows 7 / Server® 2008 / Vista® / XP and both 32bit and 64bit OS.

3.2 Software Installation

A. Insert the installation CD or download the installation software from Dediprog official website: http://www.Dediprog.com

B. If the setup program does not start automatically, select **Setup.exe** to install software. After setup dialogue box show up, read licences agreement carefully and press **Install**.

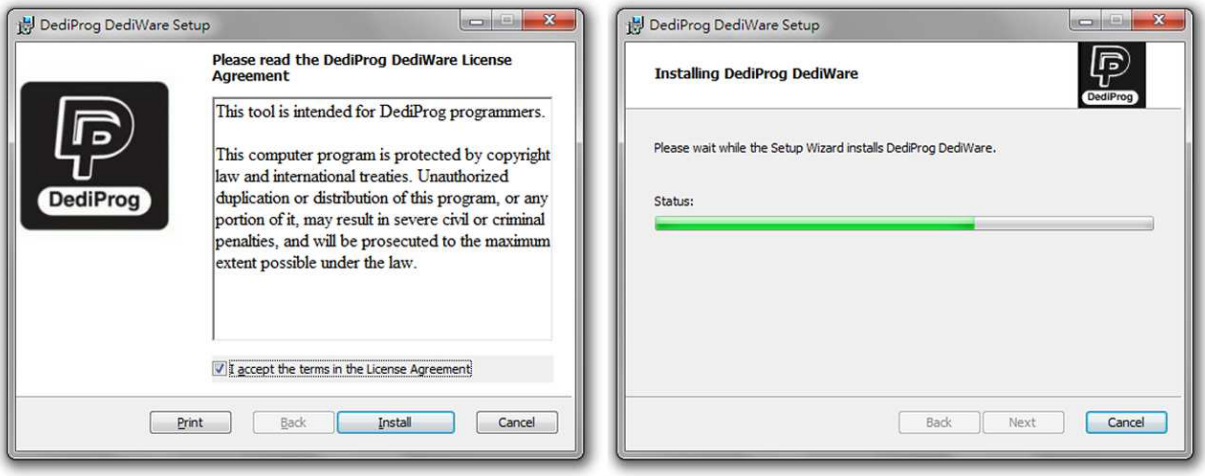
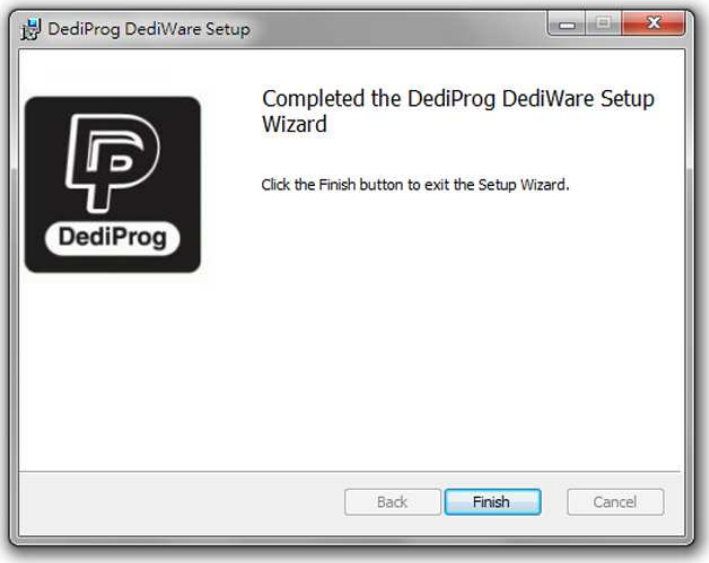

DediProg DediWare Setup
Please read the DediProg DediWare License Agreement
This tool is intended for DediProg programmers.
This computer program is protected by copyright law and international treaties. Unauthorized duplication or distribution of this program, or any portion of it, may result in severe civil or criminal penalties, and will be prosecuted to the maximum extent possible under the law.
I accept the terms in the License Agreement
Print
Back
Install
Cancel
DediProg DediWare Setup
Installing DediProg DediWare
Please wait while the Setup Wizard installs DediProg DediWare.
Status:
Back
Next
Cancel

Figure 2: Installation Dialogue box

C. Press finish to close the window after all the installation process. After Dediware installed successfully, there will be three shortcuts created automatically to your desktop and under the start menu.



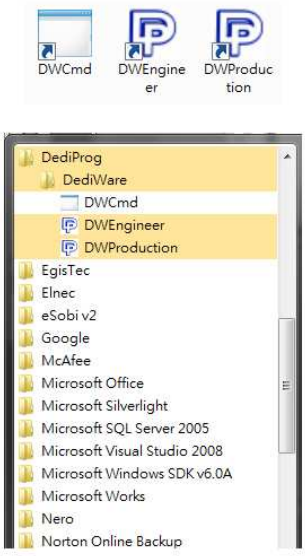


Figure 3: Finish and close the Installation Dialogue box (Left)

Figure 4: Three icons of Dediware are created to the desktop and start menu (Right)

D. Plug in and connect Dediprog programmer to your computer with USB cable and turn on Dediprog programmer. A **Found New Hardware Wizard** window will open and select **Install the Software Automatically**.

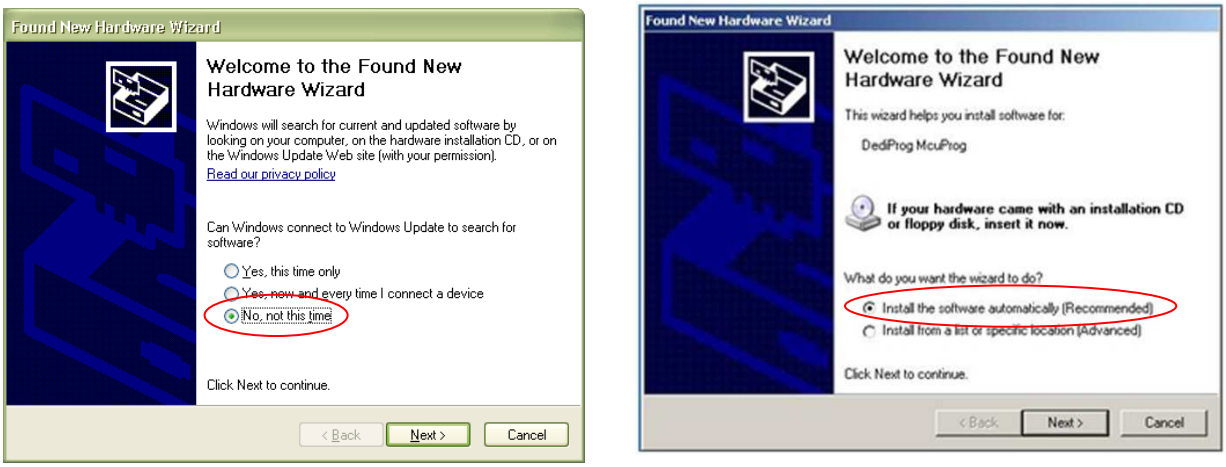
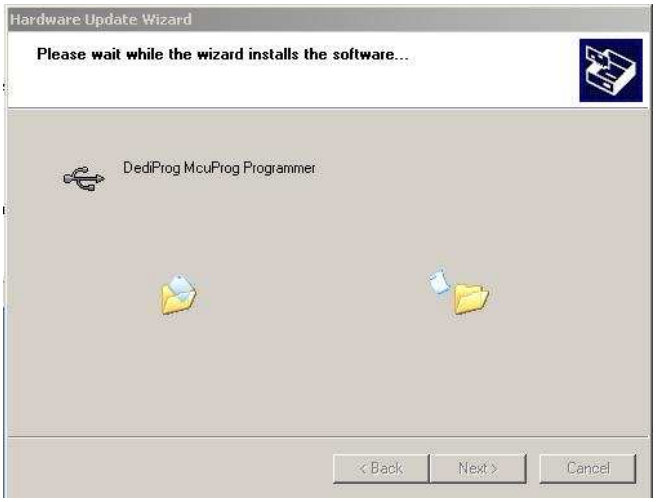

Found New Hardware Wizard
Welcome to the Found New Hardware Wizard
Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission).
Read our privacy policy
Can Windows connect to Windows Update to search for software?
Yes, this time only
Yes, now and every time I connect a device
No, not this time
Click Next to continue.
< Back
Next >
Cancel
Found New Hardware Wizard
Welcome to the Found New Hardware Wizard
This wizard helps you install software for:
DediProg McuProg
If your hardware came with an installation CD or floppy disk, insert it now.
What do you want the wizard to do?
Install the software automatically (Recommended)
Install from a list or specific location (Advanced)
Click Next to continue.
< Back
Next >
Cancel

Figure 5.6: **Found New Hardware Wizard** dialogue box

E. Hardware driver installation will run automatically and select **Continue Anyway** when **Hardware Installation** dialogue box appears. Then press **Finish** to end up installation.



Hardware Installation
The software you are installing for this hardware:
DediProg McuProg Programmer
has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)
Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
Continue Anyway
STOP Installation

Figure 7: **Found New Hardware Wizard** dialogue box (Left)

Figure 8: **Hardware Installation** dialogue box. (Right)

Figure 9: **Hardware Installation** finish

F. If the USB driver is installed properly, users can find Programmer Name under **Device Manager** when Dediprog programmer is connected.

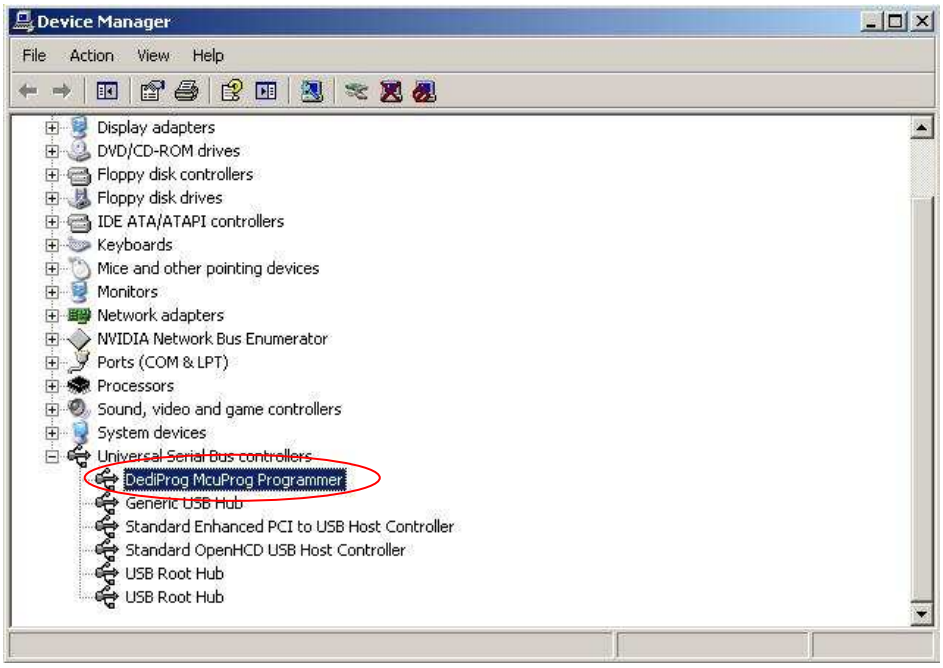


Figure 10: **Dediprog McuProg Programmer** in **Device Manager**

4 Dediprog McuProg Software Engineering GUI

DWCmd

, **DWEngineer**

, and **DWProduction**

icons and shortcuts will show on your desktop and under start menu after software installation.

DWEngineer is dedicated to for the **Engineering GUI**, and **DWProduction** is for the **Production GUI**. The following sections presents the detailed explanations of the **DWEngineer**, **Dediware Engineering GUI** operation processes and functions.

4.1 Prepare the Environment

G. Connect Dediprog programmer to computer through a USB cable and turn on Dediprog programmer.

H. Double-click on **PMEngineer**

on desktop or use the shortcut under the start menu to start Dediware

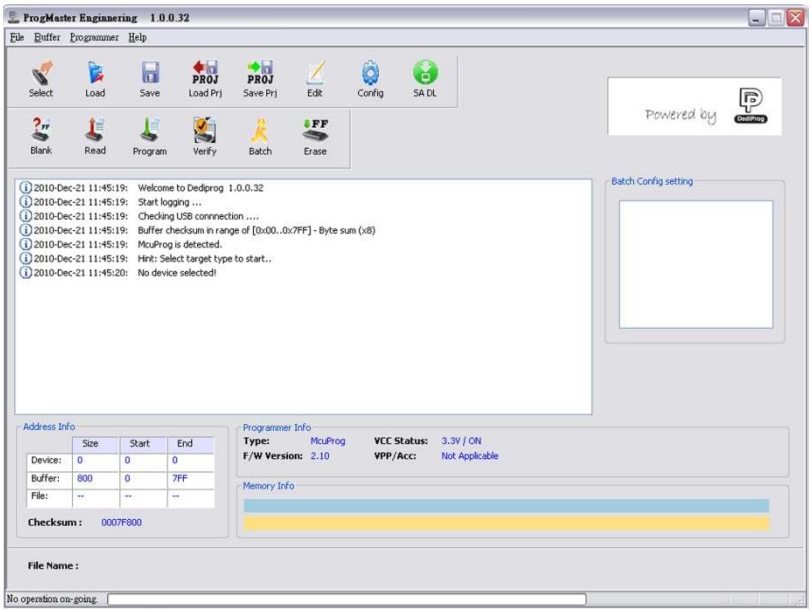


Figure 11: **Dediware PMEngineer GUI**

4.2 DWEngineer GUI Introduction

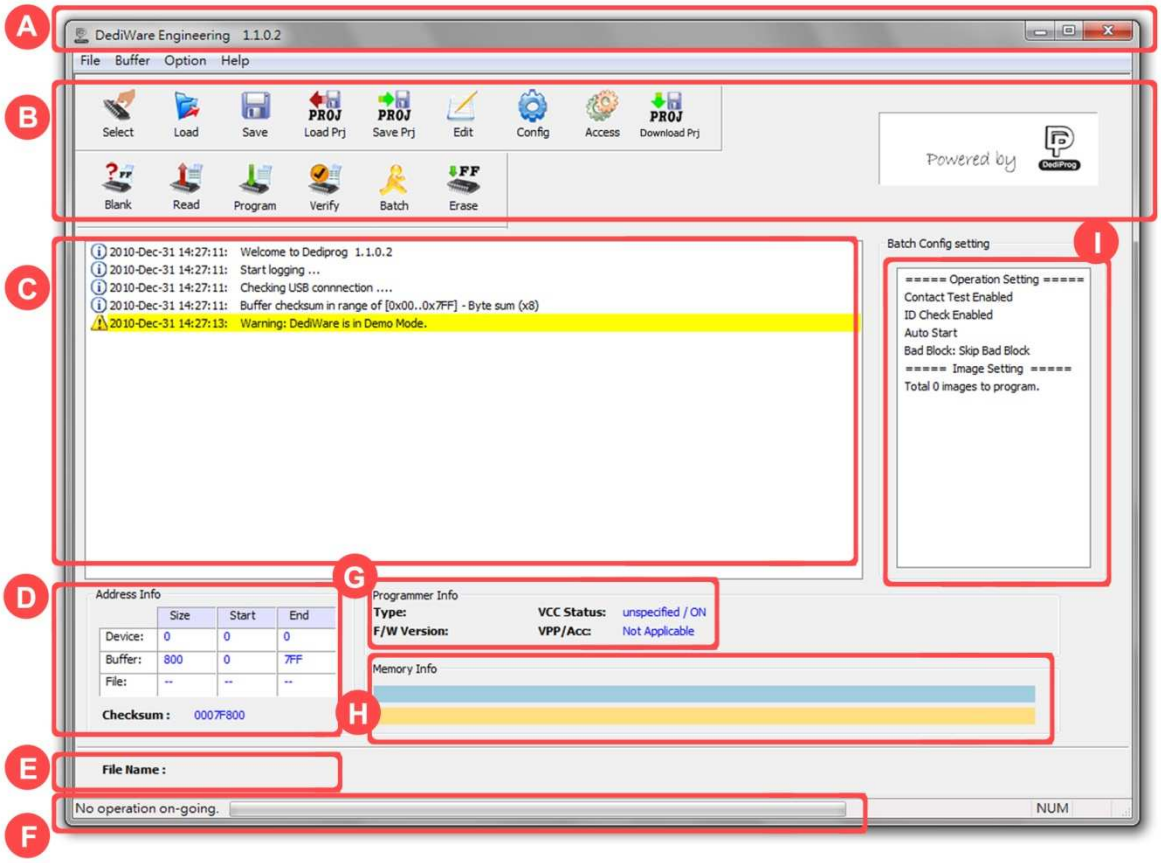


Figure 12: **Dediware PMEngineer GUI**

A. Title Bar

The title bar indicates software name and version of Dediware

B. Tool Bar

The tool bar includes icons for quick access to the majority functions.

C. Log Window

Log window contains the progress information and every step and operation made in Dediware.

D. Address Info

Address Info contains information about device, buffer, file size, and checksum information. At the same time, it shows the actual address ranges, loaded file and buffer start-end address settings.

E. File Name

File name shows the name of file and path.

F. Status Bar

Status bar provides the user with information about current status of the software and Dediprog programmers, and status of on-going operations.

G. Programmer Info

Programmer information contains the type of operating programmer, firmware version and other basic information.

H. Chip info

Chip info provides the user with information of selected IC.

I. Batch Config Setting

Batch Config Setting provides information of operation setting (Erase, Program, Vwerify...etc.), Image setting (for Nand Flash), and Option Bytes Config setting (for MCU) to users.

4.3 DWEngineer GUI Tool Bar

With button shortcuts of **Tool bar**, user can operate all the functions easily. **Tool bar** is the primary means of operating Dediware and it is comprised of the following functions.

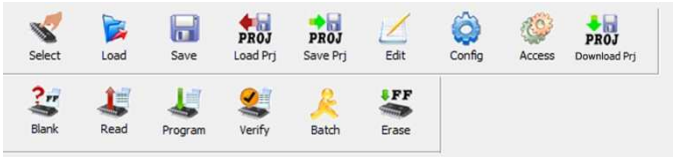


Figure 13: **Dediware Tool Bar**

A. Select

When a new chip is loaded, user has to click on **Select** to select chip manufacturer and part number. User can select the part number from the drop-down list and the selected chip type will be displayed on the top of the memory list.

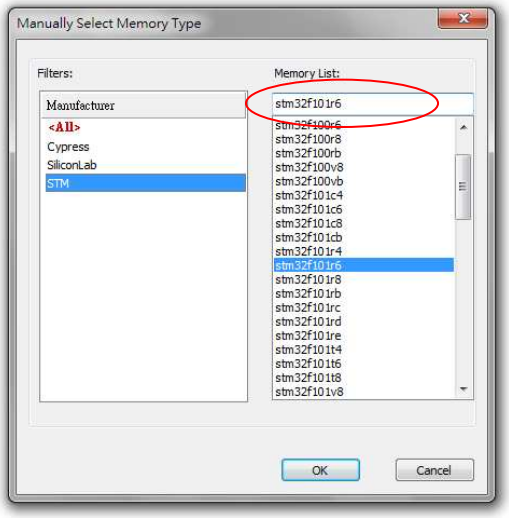


Figure 14: **Manually Select Memory Type** dialogue box for user to select their chip part number

B. Load

Select icon **Load** to load the file you intend to program.

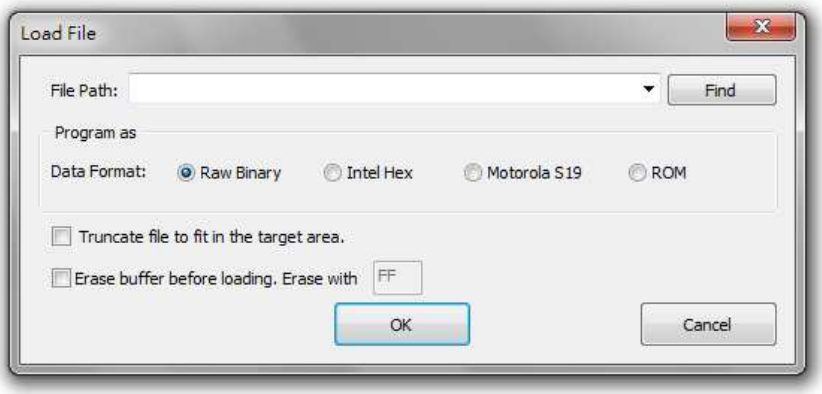


Figure 15: **Load File** dialogue box for user to load and find the programming file

C. Save

Select **Save** to save all the data in the buffer into file

D. Load Project

Project includes file and user settings and operation setting. Select **Load Project** to load file with all these settings

E. Save Project

Select **Save Project** to save file, operation setting, and user settings for project management.

F. Edit

When select **Edit**, **Buffer Editor** Window will show up. User can modify chip content and compare with loaded file in **Buffer Editor** Window. Refer to **Buffer** menu on page 21 for more information

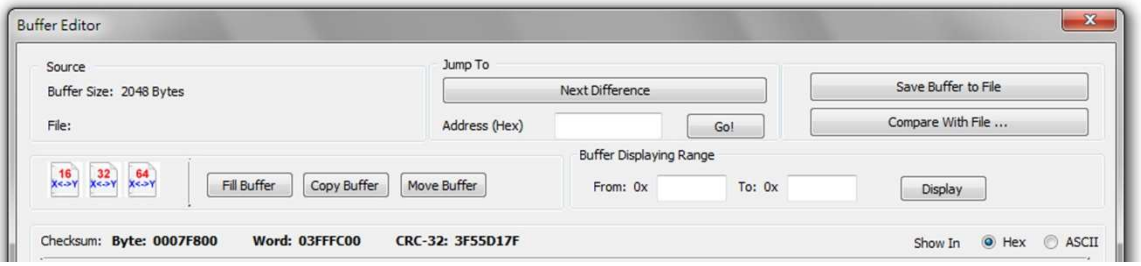


Figure 16: Functions of **Edit**

G. Config

Config allows users to configure **Batch** setting and advanced settings. Refer to **Advanced Settings Window Description** on page 23 for more details

H. Access

Access icon is only initialized when programming Nand flash chip, it allows users to adjust and modify **Nand Image Settings**.

I. Download Project

Download Project only works with Dediprog EE100 and this download mode can be operated on Dediprog EE100 instead of operating on computer**.**

J. Blank

Select icon **Blank** can check if the target chip is blank or not (the contents are all “FF”).

K. Read

Select **Read** to examine the content of chip after programming.

L. Program

Program writes the selected data from buffer into the chip.

M. Verify

Select **Verify** to do content verification between chips and loaded file.

N. Batch

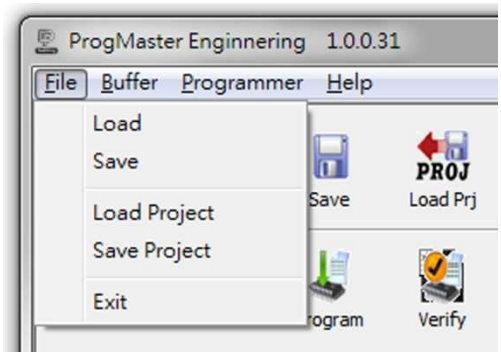
Select **Batch** and the programmer will perform a pre-configured set of operations such as (erase + program + verify) all together in one click.

O. Erase

Erase the content of chip.

4.4 DWEngineer GUI Functions

A. File



- File / Load File

  File can be loaded under the **File** menu, or click icon

Load. There are many formats of files are supported, **Raw Binary**, **Intel Hex**, **Motorola S19**, **ROM…**etc.

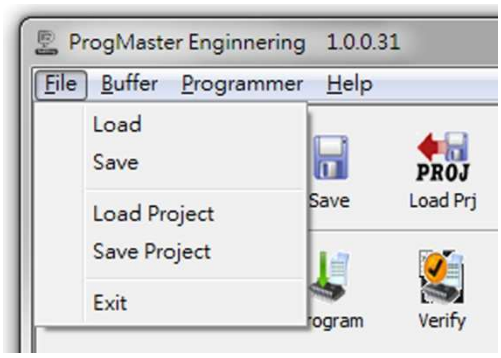
  If the loaded file size is larger than target chip size, user can click **Truncate file to fit in the target area**. User can also choose to erase buffer before loading if need. These functions are available for SPI flash, Parallel Nor flash, EEPROM and MCU

- File / Save File

  File can be saved under the **File** menu, or click icon

Save. All supported formats of file can be found from supported formats list box.

B. Project



- File / Load Project

  Projects can be loaded under the **File** menu, or click icon

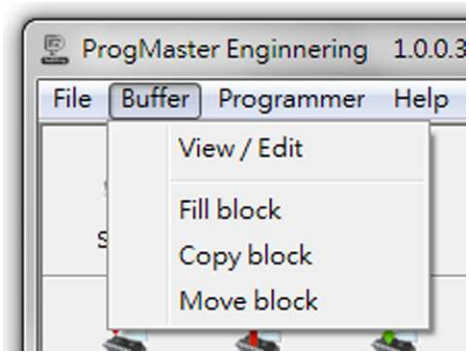
Load Project. A project contains device configuration, programming file, operation setting, and user settings

- File / Save Project

  Projects can be saved under the **File** menu, or click icon

Save Project. Engineer and R&D team can save the entire device configuration, operation setting, and user settings after editing by project save function.

C. Buffer



- Buffer / View/Edit

  Data can be viewed and edited under **Buffer** menu or click icon

Edit. User can edit, view data, compare and check the edited data in the **Buffer Edit** Window.

  - Fill Buffer: To fill selected block of buffer with requested ASCII (or hex) string. Set start address and end address to define block.

  - Copy Buffer: To copy selected block of buffer and attach to a new assigned address. Set start address, end address, and destination to define block and make copy.

  - Move Buffer: To move selected block of buffer to a new address. Set start address, end address, and destination to define block and move block.

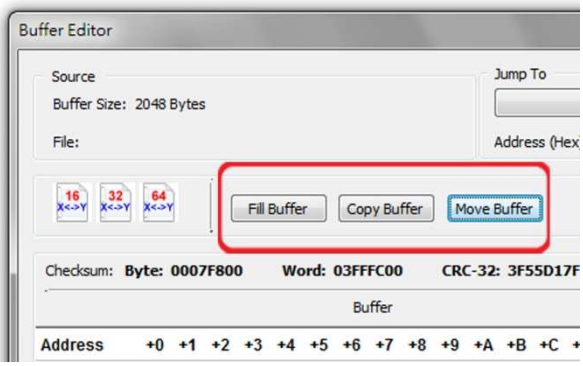


Figure 17: Edit buffer functions of **Buffer Editor Window**

  - Compare: By default the selected file contents are displayed when user enters the **Buffer Edit** window. And user can click **Compare with file** to choose file to compare, file contents and chip contents will be displayed at the same time to help user to compare.

  Moreover, when user clicks **Next Difference**, Dediware will indicate

the difference between the loaded file and edited file. User also can assign Dediware to go to the address user wants to examine by entering line number into the **Address** column

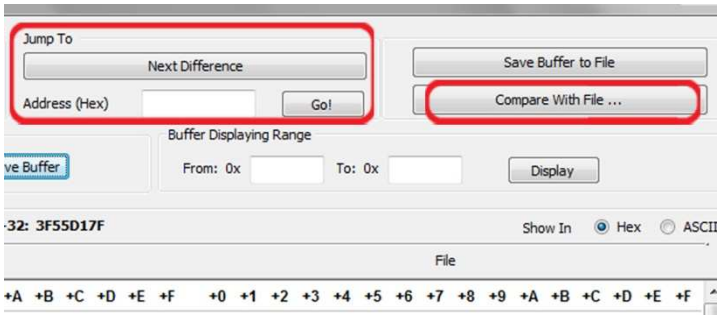


Figure 18: Compare buffer functions of **Buffer Editor Window**

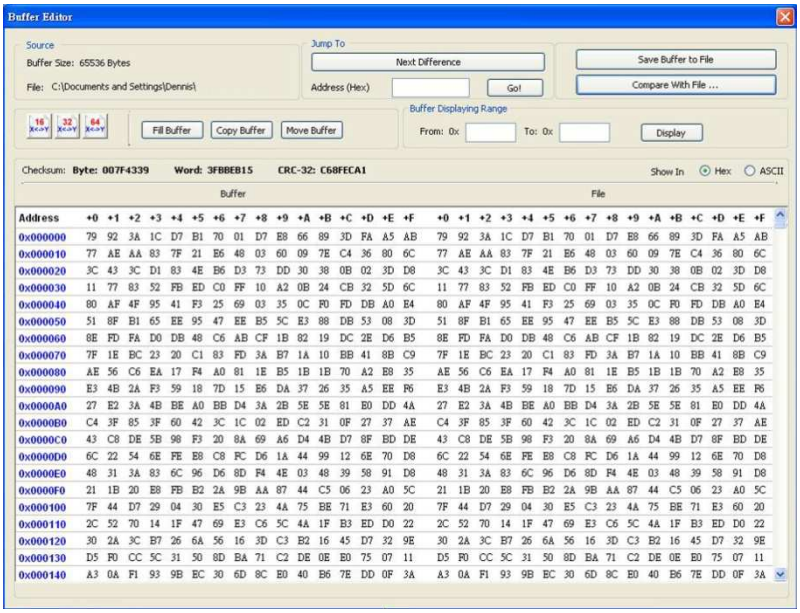


Figure 19: Compare buffer functions of **Buffer Editor Window**

D. Programmer Operation

- Advanced Setting

User can click **Config**

to modify advanced setting include **Batch Operation Option** setting. And according to different types of chip inserted, different specific advance settings will be initiated.

- Batch Operation Option: User can use **Add** and **Remove** buttons to add or remove the operations in a batch. Select **Add** to add the function in the left column to the end of right column. Select **Remove** to remove function in the right column.

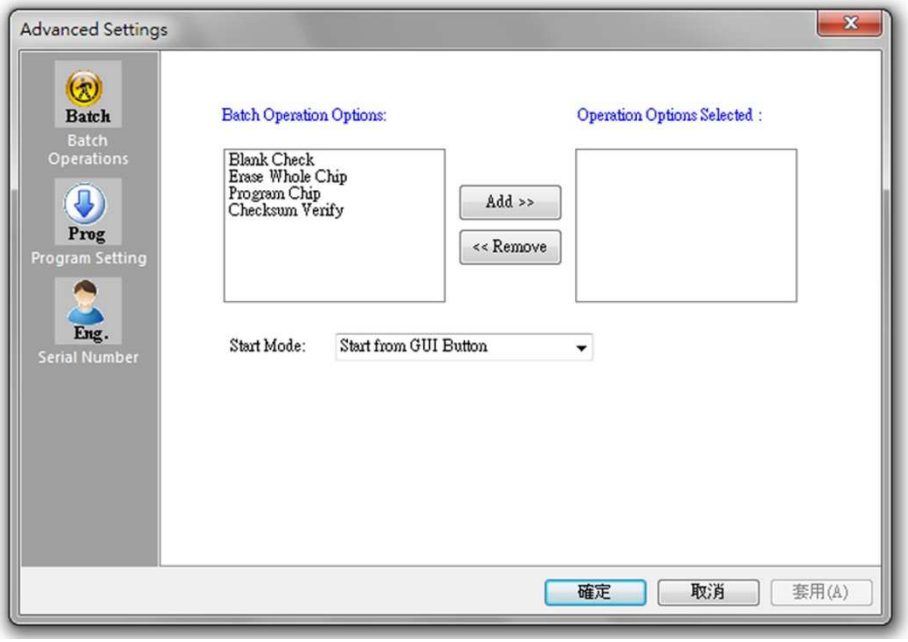


Figure 20: **Batch Operation** Setting of **Advanced Setting Window**

User can press **Batch**

after set up the **Batch Operation** setting to perform a pre-configured set of operations.

- Nand Image Setting

User can click icon **Access**

to access advanced setting of Nand flash programming include **Bad Block Management** and **Spare Area**. Dediware supports up to eight Nand Image setting since user can load up to eight Nand images to program.

5 Dediware Production GUI

5.1 Prepare the Environment

A. In order to run more than one programmer at the same time and keep the same quality, USB hub with individual power supply is highly recommended.

B. Connect all the programmers to PC before starting Dediware and it is not recommended to add (plug in) or reduce (unplug) any number of programmers when the software is already operating.

C. Dediware does not support auto detect feature in production GUI and therefore “programmer search” and “chip select” are required prior to any other operations.

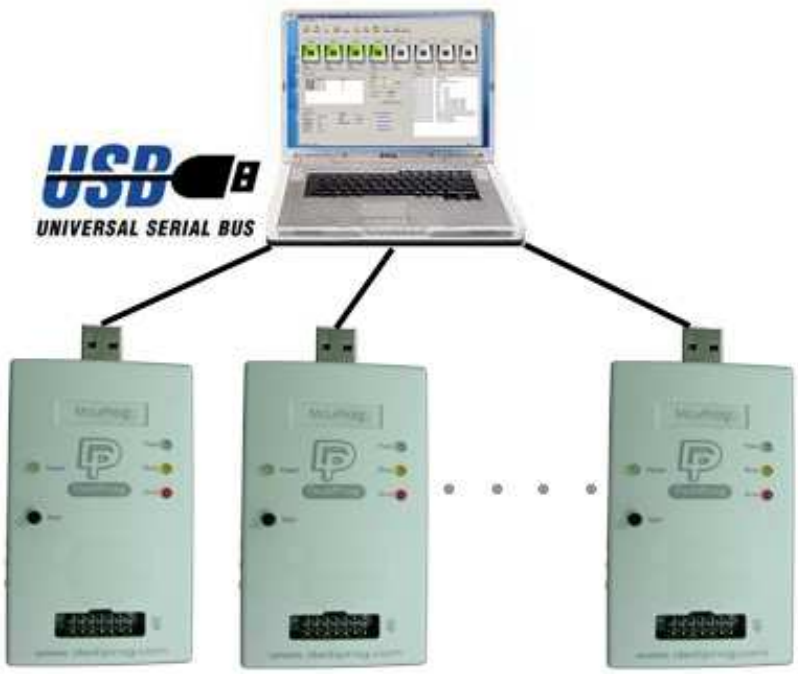


Figure 21: Multi-Programmers Capability

5.2 DWProduction GUI Introduction

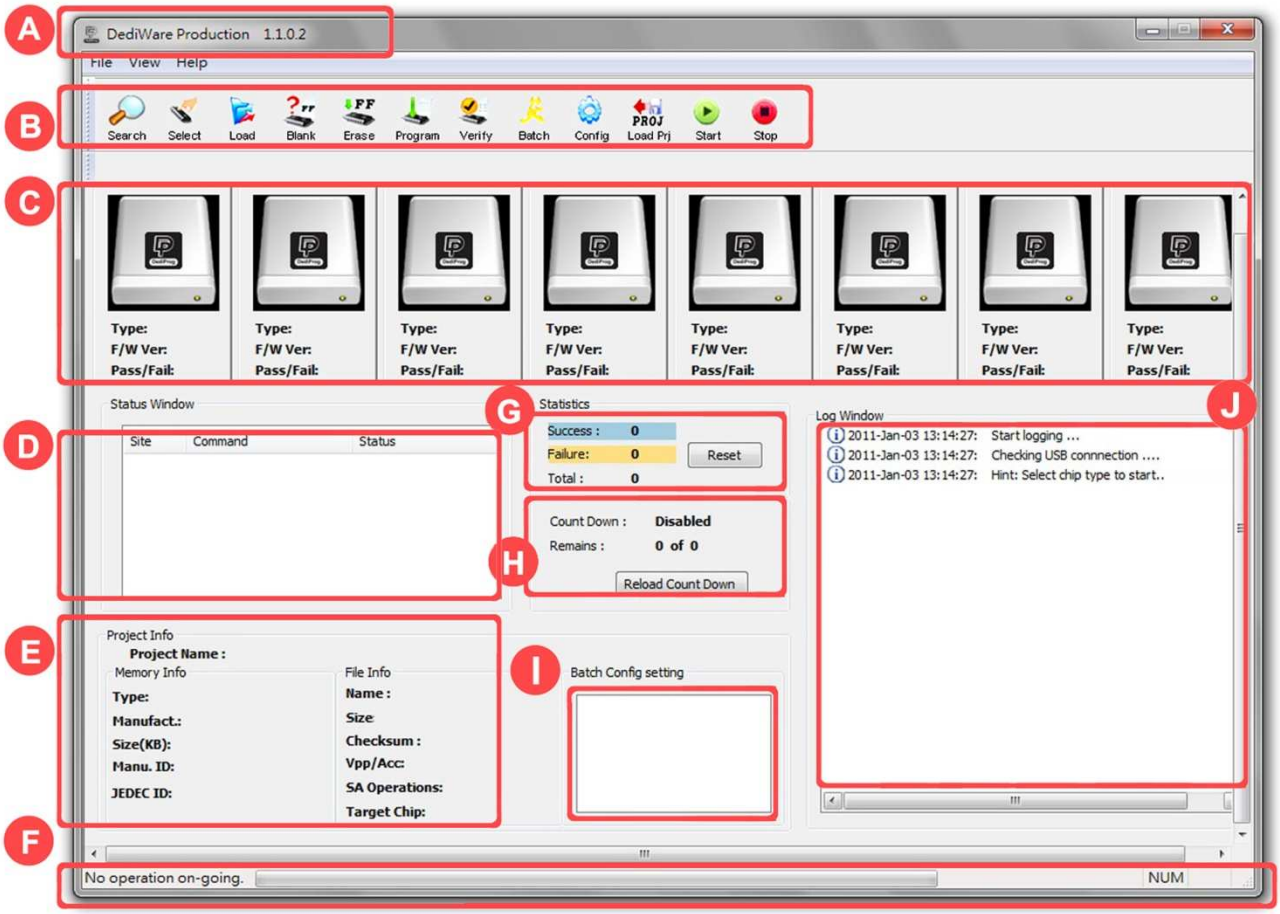


Figure 22: DWProduction GUI

A. Title Bar

The title bar indicates software name and version of Dediware

B. Tool Bar

The tool bar includes icons for quick access to the majority functions. In DWproduction GUI, tool bar can be switched off under the **View** menu.

C. Programmer Window

Programmer window indicates the status of every programming programmers. There are three lights with different colour will appear in each programmer to

indicate the status of programming. These three light displays following status: Green light indicates pass or ready to program, yellow light indicates at work and red light indicates failed.

D. Status Window

Status Window contains information about processing programmers.

E. Project Info

Project info shows detail information of project content.

F. Status Bar

Status bar provides the user with information about current status of the software and Dediprog programmers, and status of on-going operations. In DWproduction GUI, tool bar can be switched off under the **View** menu.

G. Statistics Window

Statistics Window indicates the number of successful, unsuccessful, and total programmed chips.

H. Count Down Window

Count Down function helps user to know how many chips are last and need to be programmed.

I. Batch Config Setting

Batch Config Setting contains information of programming operations.

J. Log Window

Log window contains the progress information and every step and operation

made in Dediware. All the log data can be saved as text format by selecting **Save Log** under the **File** menu.

5.3 DWProduction GUI Tool Bar

The production GUI manual will only illustrate the icons not covered by the engineering GUI. Function explanations such as **Program**, **Erase**, **Blank**, etc will not be repeated here, therefore only Start and Stop functions are discussed here.

Figure 22: DWProduction tool bar

A. Start

When users enable **Automatic Detection Mode** on specific Dediprog programmers, user need to click on **Start** to start auto-detecting programming before programming.

B. Stop

When users enable **Automatic Detection Mode** on specific Dediprog programmers, user need to click on **Stop** to stop auto-detecting programming.

5.4 DWProduction GUI Functions

A. Select and Search

When click on **Search**

, Dediware will scan and detect all the connected programmers by default. The searched programmers will be listed along with random site number. Users can use the Blink function and Up and Down button to adjust the real sequence of the connected programmers. When user can click Blink, the connected programmer will blink its green LED on the hardware once. Therefore, this feature can help user to locate the programmer.

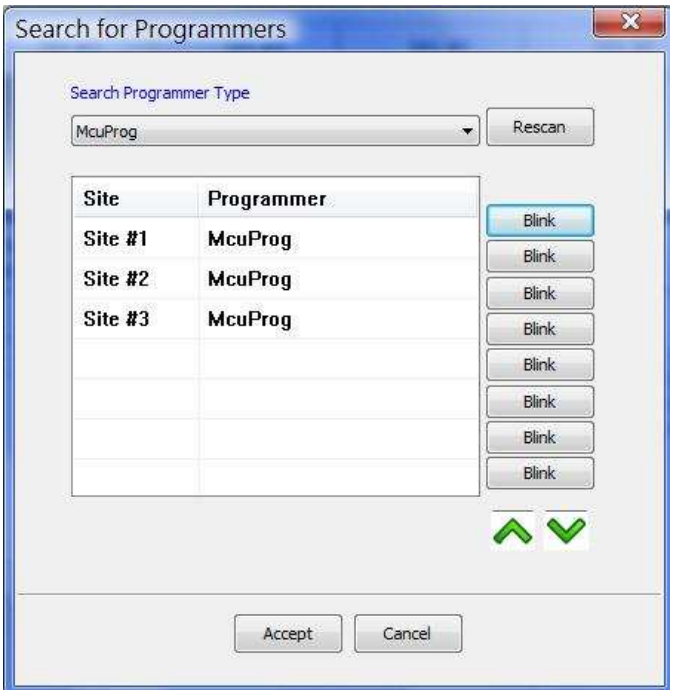


Figure 23: Search for Programmers Window

After **Search**, user needs to press **Select**

to select memories and the main GUI will update information on the Status Window, the status window and the log window for user to examine.

B. Single Site Programming

By click on the right mouse button after pointing to a specific programmer Site number, users will have the access of programming options to the pointed programmer site.

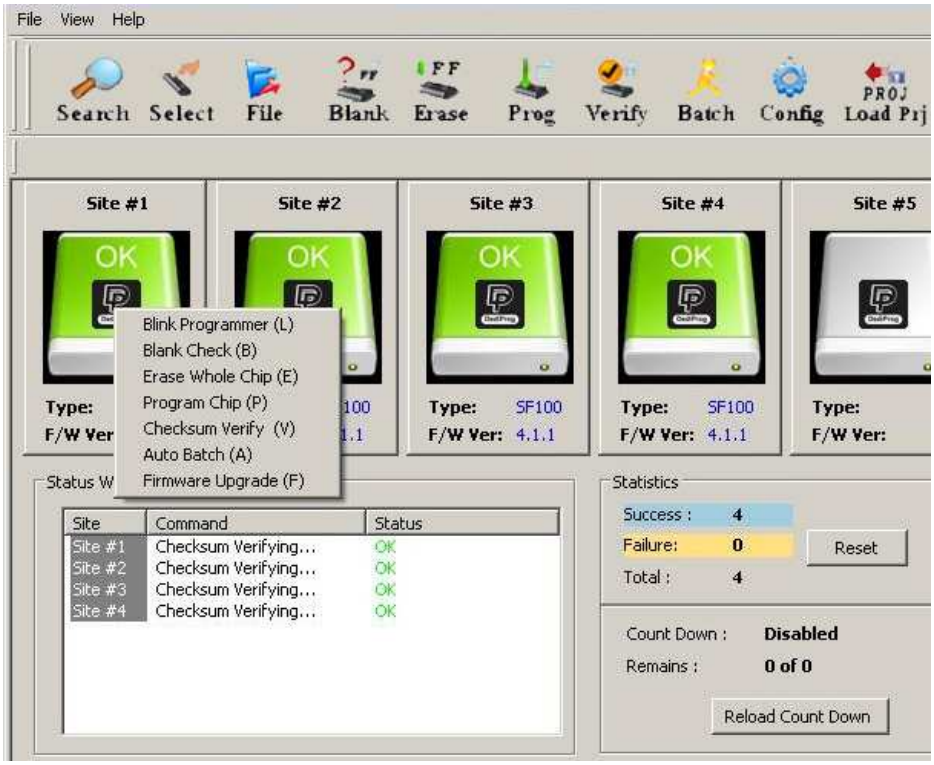


Figure 24: Click on the right mouse button to access specific programmer settings.

C. Auto Detection Programming

User can enable **Auto Detection Mode** in **Config**

setting when using Dediprog ProgMaster. Dediprog ProgMaster will detect inserted chip and start to program automatically. As a result, users can change chips to program without operating computer. In order to start or stop this mode, user can click on the **Start**

or

on tool bar.

Appendix

Dediprog publishes software updates on the Dediprog website regularly. You can download and upgrade your software from our website. Non-users may download the software for evaluation.

Troubleshooting

If our user manual does not answer your questions, you can contact Dediprog directly. You can call Dediprog within working hours between Mon-Fri 9:00AM-12:00PM & 1:00PM - 60:00PM. Make sure you have your product serial number before calling.

Also, before contacting Dediprog, check the following to ensure you have the best service.

• Read the User Manual.

• If you receive an error message that is not explained:
– Make sure you can repeat the circumstances that created the error.
– Write down or use Printscreen to take photo of the error message.

• Check computer configuration, computer brand, and free chip size before starting Dediware, the video adapter brand and the operating system.

• Make sure you have your product serial number with you when phone us.

•When you phone us, please make sure you are at your computer so we can guide you through the solution.

Contact Information

http://www.Dediprog.com

4F, No.7, Ln. 143, XinMing Rd.,
Neihu Disr., Taipei City 114
Taiwan

General Consultation/ Order and Sales

+886-2-2790-7932
sales@Dediprog.com

License Agreement

The copyright of the programmer and the user manual remain the property of Dediprog.

You may:
1. Make a copy for back-up purposes ONLY in support of Dediprog programmer usage on a single computer.

2. Transfer the program and license to another party if the other party agrees to accept the terms and conditions of this agreement.

You may not:

1. Use our product on a computer system or network that allows the program to be operated by more than one user at the same time.

2. Modify, transfer, or copy Dediprog user manual or other documentation.

3. Decompile or disassemble any Dediprog program modules.

Warranty

Dediprog has a strict quality assurance system. We guarantee that the Dediprog's products that you have purchased or leased from Dediprog are free from defects in materials or workmanship under normal use during the One-year Warranty Period. If the software or hardware has any defects, it can be repaired or replaced free according to the specific situation within one-year period after the user purchases Dediprog's product.

The warranty is based on proper installation of the software and usage in the specified working environment. Dediprog is not responsible for the following cases:

• Product has been repaired, used, or changed by any organizations or persons who are not authorized by Dediprog

• Product damage caused by accident, abuse, misuse, liquid contact, fire, earthquake or other external causes.

• Product damage caused by operating the product outside the permitted or intended uses described by Dediprog.

• Product or part that has been modified to alter functionality or capability without the written permission of Dediprog.

• Product serial number has been changed by the user or other person.

• The program errors caused by the physical damage of the chip